Abstract

Mental stress quantification using fuzzy analysis of ecg parameters is presented here. ECG signal is decomposed using the BIOR-3.9 wavelet family up to three levels. The approximates signals are used for computation ecg parameters like energy, entropy, power, standard deviation, mean and covariance. A fuzzy classifier is designed using trimf function as associate membership in fuzzy analysis. The ecg data base is taken from MIT data base web site.
- G. Ranganathan, V. Bindhu, Dr. R. Rangarajan, "ECG Signal Processing using Dyadic wavelet for Mental Stress Assessment", 978-1-4244-4713-8/10/$25. 00 ©2010 IEEE.
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**Index Terms**

- Computer Science
- Fuzzy Systems

**Keywords**

- ECG
- BIOR-3. 9 wavelet
- Entropy
- Energy
- Power
- Standard Deviation
- Covariance
- Fuzzy Logic
- Mental Stress